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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,264	10/17/2003	Yehuda Cern	2147.012USU1	4602

7590 06/14/2005

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EXAMINER

NGUYEN, HUNG T

ART UNIT PAPER NUMBER

2636

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/688,264

Applicant(s)

CERN, YEHUDA

Examiner

Hung T. Nguyen

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 October 2003.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1, 2, 4 and 5 is/are rejected.  
7) ☒ Claim(s) 3 and 6 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/16/04 & 2/18/05.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Information Disclosure Statement*

1. An IDS received on Sept. 16, 2004 for serial # 10/688,264 with **incorrect title** as "Full Duplexing for Power Line Data Communications". Please correct it.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Whyte et al. (U.S. 3,924,223).

Regarding claims 1 & 4, Whyte discloses a method for blocking a portion of energy of a signal in a power line in a form of terminating impedance network (46,46A) provided on a customer load side of the coupler (43) via communication signals (16) of the power line [ figs. 1-3, col. 5, lines 56 to col. 8, lines 12 and abstract ] comprising:

Art Unit: 2636

- a resonant LC circuit devices (54,55,56) [ figs.2,4, col.6, lines 27-45 and col.7, lines 57-63 ];
- the resonant LC circuit devices (54,55,56) comprises signal conductors (23A,23B,23C) fed through magnetic core members (58A,59A,60A) and also having parallel capacitors (62,63,64) [ figs.2-4, col.6, lines 27-45 and col.7, lines 24-63 ];
- the resonant LC circuit devices (54,55,56) are tuned to mid-frequency of the bandwidth of the network to provide higher impedance, where the impedance is directly related to resistance, thus providing blocking of energy [ figs.2-4, col.6, lines 27-45 and col.7, lines 24-63 ].

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whyte et al. (U.S. 3,924,223) in view of Clunn (U.S. 6,191,589) further in view of Walker (U.S. 4,760,484).

Regarding claims 2 & 5, The reference of Whyte does not specifically mention the magnetic core includes an air gap.

In fig.2, Clunn teaches a prior art well known gapped ferrite as a toroid core (T2) with AC power line passing through the device with an air gap to prevent saturation at high current [ fig.2, col.4, lines 1-9 ].

Art Unit: 2636

Furthermore, Walker teaches a ferrite bead , similar to that of Whyte, where the gap increase the BD curve allowing additional or higher level of saturation [ figs.3-4, col.2, lines 44-57 ].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Clunn & Walker in the system of Whyte for providing the same function as desired.

### ***Allowable Subject Matter***

6. Claims 3 & 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### **Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Montague (U.S. 4,434,396) Power line transient suppression circuit.
- Hardy et al. (U.S. 4,675,579) Coupling of carrier signal from power line.

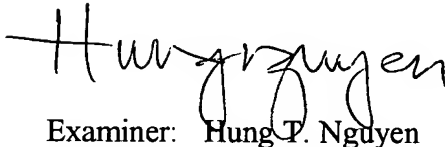
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung T. Nguyen whose telephone number is (571) 272-2982. The examiner can normally be reached on Monday to Friday from 8:00am to 5:30pm.

Art Unit: 2636

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass, Jeffery can be reached on (571) 272-2981. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

**HUNG NGUYEN  
PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to read "Hung T. Nguyen", is written over the printed name.

Examiner: Hung T. Nguyen

Date: June 9, 2005